

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.(Currently amended) An air conditioning system for conditioning the space within an enclosure having an air-conditioning space at least one inlet opening and one outlet opening, the system comprising:

first and second liquid/air heat exchangers each disposed in a housing having an air inlet and an air outlet;

said first heat exchanger having an opening for receiving fresh air from the environment and for propelling the fresh air through said first heat exchanger to exchange heat with the liquid of said second liquid/air heat exchanger before it is entered into said enclosure⁷;

each of the first and second heat exchangers ~~includes~~ including:

a housing having a liquid reservoir at its lower section and an evaporative media at its upper section;

a dripping chamber between said reservoir and said evaporative media;

liquid outlets disposed above the evaporative media;

means for forcing air to enter said housing and form a counter-flow relative to the liquid flow exiting from the liquid outlets,

means for propelling liquid from the reservoir to said liquid outlets,

passageway for propelling conditioned air to the opening of said enclosure, and

the second heat exchanger having an opening connectable to said outlet opening of the enclosure for receiving air from air-conditioned space of the enclosure and for propelling it through said second heat exchanger to exchange heat with the liquid before it is expelled into the atmosphere,

wherein conduit means directly interconnect the reservoirs, and

said evaporative media include at least one cross-fluted structure composed of multi-layered, corrugated cardboard sheets forming an array of inlet openings on a first side of said structure, and an array of outlet openings on a second side of said structure substantially opposite said first side, wherein said evaporative media has a Reynolds air flow number of less than 2000.

2. (Original) The system as claimed in claim 1, further comprising a heat pump, said first and second heat exchangers being in fluid communication with each other through said heat pump.

3. (Cancelled)

4. (Original) The system as claimed in claim 2, wherein said heat pump comprising:

an evaporator;

a condenser, and

a refrigerant compressor and an expansion valve interconnecting said evaporator and said condenser.

5. (Original) The system as claimed in claim 4, wherein said heat pump further comprising means for reversing the flow of said refrigerant.

6. (Cancelled)

7. (Previously presented) The system as claimed in claim 2, wherein each of said reservoirs is in fluid communication with said heat pump via pump means.

8. (Original) The system as claimed in claim 4, wherein the outlet from said evaporator is in fluid communication with the liquid outlets of said second heat exchanger and the reservoir of said second heat exchanger is in fluid communication with the liquid outlets of said first heat exchanger.

9. (Original) The system as claimed in claim 7, further comprising a multi-way valve operationally connected between said reservoirs and said heat pump.

10. (Original) The system as claimed in claim 7, wherein the reservoir of said first heat exchanger is in fluid communication with said evaporator and the reservoir of said second heat exchanger is in fluid communication with said condenser.

11. (Original) The system as claimed in claim 7, wherein the reservoir of said first heat exchanger is in fluid communication with said condenser and the reservoir of said second heat exchanger is in fluid communication with said evaporator.

12. (Previously presented) The system as claimed in claim 1, wherein said means for forcing air into said housing is a fan located above said liquid outlets.

13. (Original) The system as claimed in claim 12, further comprising a drift eliminator located between said liquid outlets and said fan.

14. (Original) The system as claimed in claim 1, further

comprising a humidifier disposed in the passageway leading from said first heat exchanger to said enclosure.

15. (Previously presented) The system as claimed in claim 1, wherein one of said reservoirs further comprises an inlet port for adding liquid to replenish evaporation and a second of said reservoirs comprises an outlet port for draining excess liquid.

16. (Original) The system as claimed in claim 1, wherein said liquid is a liquid desiccant.

17. (Original) The system as claimed in claim 1, wherein said liquid is brine.

18. (Currently amended) A method for air-conditioning an enclosed space, comprising:

providing an air-conditioning system as claimed in claim 1, and

~~precooling~~ pre-cooling said liquid prior to entering same into the evaporator by utilizing cooled air from said space.

19. (Original) A method for air-conditioning an enclosed space, comprising:

providing an air-conditioning system as claimed in claim 4, and

utilizing the heat pump for preconditioning the liquid passing therethrough before propelling the liquid through said heat exchangers.

20. (Currently amended) The method as claimed in claim 19, comprising extracting heat from said ~~condensor~~ condenser by cooling liquid passing therethrough with cooled air.

21. (Currently amended) The method as claimed in claim 19,

comprising preheating liquid in said ~~condensor~~ condenser by exchanging heat between liquid and heated air.

22. (Previously presented) The method as claimed in claim 21, comprising heating the evaporator by liquid heated by exchanging heat between said liquid and heated air.

23. (Original) A method for evaporation of industrial wastes, comprising:

providing a system as claimed in claim 15;
replenishing the reservoir of the heat exchanger receiving fresh air from the environment with liquid desiccant, and
draining excess water from the reservoir of the other heat exchanger.

24. (Cancelled)